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EXAMINER
JAIN, RAJ K

ART UNIT	PAPER NUMBER
2416	

NOTIFICATION DATE	DELIVERY MODE
04/10/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 December 2008*.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9 and 12-27* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-9 and 12-27* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on *3/31/04* is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some *   c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION
Claim Objections

Claims 17-20 are objected to because of the following informalities:

Claim 17, amend preamble as follows; "A computer-readable medium encoded with a computer program, ~~the computer program comprising code to~~ executed by a processor to perform steps to:"

Claims 18-20, amend accordingly to overcome any antecedent basis due to above claim 17 amendment.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim(s) 9,12-16 and 21-27 is/are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to particular machine, or (2) transform underlying subject matter (such as an article or material) to a different state or thing. See page 10 of In Re Bilski 88 USPQ2d 1385. The instant claims are neither positively tied to a particular machine that accomplishes the claimed method steps nor transform underlying subject matter, and therefore do not qualify as a statutory process.

The elements of Claim(s) 9 and 21 of "transmitting, receiving and determining...." are broad enough that the claim could be completely performed mentally, verbally or without a machine nor is any transformation apparent and further

1) do not tie to another statutory class (such as a particular apparatus) by identifying the apparatus that accomplishes the method steps.

2) do not have a structure required by the claim, or positively recited in the body of the claim in association with a step significant to the inventive concept.

A claim reciting an adequate structural tie must positively recite the structure of another statutory category in association with a step significant to the inventive concept. The following are examples of structural recitations **that do not constitute** adequate structural ties per se: (1) Structure recited in a preamble alone, (2) structure in a phrase expressing intended use or purpose, and (3) structure in a step insignificant to the inventive concept, such as nominal pre or post solution activity.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 7-9, 15-18, 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawatari (US 2002/0004841 A1) in view of Abaye et al (USP 7,260,060 B1).

Regarding claim(s) 1, 9, 17 and 21, Sawatari discloses an method and apparatus, comprising: a first node 10 (Fig. 1); a second node 20, coupled to the first node 10 via first network path 30 (paras 29 and 35, the node 10 section 14 is configured to transmit packets to node 20);

a first processor 12 associated with the first node (RTP section receives and processes the data to be transmitted; Para 33); and a second processor 22 associated with the second node, configured to receive a packet of data from the first processor, the packet of data including a condition of the first network path (paras 103-105),

calculate a severity level for the first network path based on the condition of the network path (paras 41 and 75, upon receipt of data the severity level is calculated by the RTP receiving section 22) and transmit the severity level to the first processor (Para 43, section 23 informs the transmitting side 10 the data receiving state of node 20);

wherein the first processor is further configured to update the one of the plurality of admission policies based on the transmitted severity level (para 50).

Sawatari fails to disclose having a plurality of call admission policies associated with one of a plurality of severity levels within its network.

Abaye discloses having a plurality of call admission policies associated with one of a plurality of severity levels within its network (Figs. 5 & 9, col 7 lines 29-40; col 11 lines 30-67, call admission policy is based on service level agreements incorporating elements such as QoS, average response time, latency, data rates, etc.).

Implementing a call admission policy with differing severity levels enhances network throughput by optimal bandwidth usage thus increasing the efficiency of network resources. Thus it would have been obvious at the time the invention was made to incorporate the teachings of Abaye within Sawatari so as to enhance overall network throughput and efficiency.

Regarding claim(s) 2, Sawatari discloses wherein the severity level is based on a packet delay and a packet loss ratio between the first node and the second node (paras 35, 57 and 78, for example QoS is based on link quality and/or packet delay and/or loss.).

Regarding claim(s) 3 Sawatari discloses wherein the packets of data are associated with a plurality of classes of data, the one of the plurality of call admission policies being configured to block packets of data associated with at least one class of the plurality of classes of data when the severity level is greater than or equal to a predetermined threshold severity level (abstract, Paras 16, 18, 81 and 84-87).

Regarding claim(s) 7 and 15, Sawatari discloses a memory device associated with the first node, the memory device being configured to store data associated with at least one of the severity level; a packet delay; the total number of received packets; and a packet loss (Fig. 2, paras 46, 63, 67 and 68).

Regarding claim(s) 8 and 16, Sawatari discloses a memory device associated with the first node, the memory device being configured to store data associated with a destination list and a source list, the destination list including data associated with packets of data being transmitted from the first node to the second node and the source

list including data associated with packets of data being received at the first node (Fig. 3, paras 54, 55 and 60-65).

Regarding claim(s) 18, Sawatari discloses calculate a cost function based on a packet of data received from a remote node; update a severity level; and transmit the severity level to the remote node (Para 75, Sawatari calculates a loss ratio which examiner translates to cost as packet loss directly relates to retransmission of the missing or lost packets by the source and therefore incurring further transmission cost).

Regarding claim(s) 22, Sawatari discloses wherein maintaining the quality of service includes maintaining the quality of service on communications network (abstract, paras 1, 4 and 34, Sawatari discloses a general communication apparatus that can be easily applied to different networks including military network, WAN, secure network and a commercial network as desired).

Regarding claim(s) 23, Sawatari discloses maintaining the quality of service includes maintaining the quality of service on a secure network (Fig. 1, while Sawatari discloses a generic communications network, one skilled in the art will appreciate that security within the network is either inherent or can be incorporated to prevent hacking and the like and therefore even though not explicitly disclosed, however, again it is either inherent or can be added if so desired to prevent attacks and the like.)

Regarding claim(s) 24 and 25, Sawatari discloses wherein the quality of service is maintained on a military network (Again in line with reasoning from claim 23, the same network with security enhanced features can be applied to both commercial and/or military applications preventing computer information theft such as hacking and/or melious attacks to destroy information).

Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawatari (US 2002/0004841 A1) in view of Abaye et al (USP 7,260,060 B1) and further in view of Calvignac et al (USP 5557608).

Sawatari and Abaye fail to disclose a multilevel precedence and preemptive policy. Calvignac discloses a multilevel precedence and preemptive policy (col 1 lines 40-62; col 3 line 34 – col 4 line 34, Calvignac discusses the use of preemptive policy

which uses high and low priority classes of service where the low priority class is replaced or taken over with high priority class whenever a high priority packet arrives.). A preemption policy allows for different priority levels to be set so as to allow transmission of packets based on the predefined criteria and based on characteristics of the communication link.

Thus it would have been obvious at the time the invention was made to incorporate the teachings of Calvignac within Sawatari allowing users to predefine transmission characteristics as appropriate based on the severity level of packets to be transmitted.

Claims 4,12,19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawatari (US 2002/0004841 A1) in view of Calvignac et al (USP 5,557,608) further in view of Khan et al (USP 6,400954 B1).

Regarding claim(s) 4, 12, 19 and 20 Sawatari fails to disclose different service classes and Calvignac fails to disclose traffic threshold levels for blocking of calls.

Khan discloses different service classes in a network with different threshold levels (col 2 line 65 - col 3 line 7; col 6 line 26-49. Different classes of service provide a controlled allocation of call blocking and/or packet delay which results when the network reaches or exceeds its capacity limits.

Thus it would have been obvious at the time the invention was made to incorporate the teachings of Khan within Sawatari so as to enhance network performance by allocating network resources based on service class parameters and limiting capacity limits.

Allowable Subject Matter

Claims 5,6,13 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 1-9, 12-27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAJ JAIN whose telephone number is (571)272-3145. The examiner can normally be reached on M-TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Raj K. Jain/
Examiner, Art Unit 2416